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RCA-03/0048/69

[redacted]

Basic Imagery Interpretation Report

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

25X1

[redacted]

YEVPATORIYA DEEP SPACE TRACKING FACILITY, NORTH
YEVPATORIYA DEEP SPACE TRACKING FACILITY, SOUTH

25X1

[redacted]

DEPLOYED COMM/ELEC/RADAR FACILITIES

USSR

JULY 1969

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INSTALLATION OR ACTIVITY NAME	COUNTRY
Yevpatoriya Deep Space Tracking Facility, North Yevpatoriya Deep Space Tracking Facility, South	UR

UTM COORDINATES	GEOGRAPHIC COORDINATES
NA	43-13-10N 033-10-00E 45-10-20N 033-15-35E

MAP REFERENCE

ACIC. US Air Target Chart 200, Sheet M0250-19HL, 4th ed, Jun 66, scale 1:200,000 (SECRET

LATEST IMAGERY USED	NEGATION DATE (If required)
	NA

ABSTRACT

This report contains a location map, a description of the facilities, mensuration, and line drawings of the Yevpatoriya Deep Space Tracking Facility (Yevpatoriya Deep Space Tracking Facility, North, and Yevpatoriya Deep Space Tracking Facility, South). It has both transmitting and receiving functions, and apparently operates in conjunction with the Simferopol Space Flight Center to support Soviet lunar and deep space programs. The Yevpatoriya transmitting (referred to in this report as southern station) and receiving (referred to in this report as northern station) facilities are connected to each other and to the Simferopol facility by an R-400 microwave relay system.

Construction activity at the transmitting site has been limited to minor additions since the facility was first observed in At the receiving site, changes between included the addition of three dish tracking antennas, SHIP WHEEL-type antennas, and possible telemetry antennas.

INTRODUCTION

The Yevpatoriya Deep Space Tracking Facility is approximately 9 nautical miles (nm) west of the town of Yevpatoriya on the Crimean Peninsula (Figure 1). It is subdivided in this report as northern and southern tracking stations, 5 nm apart, with a microwave facility located between them. The northern station serves as the receiving facility and the southern station serves as the transmitting facility. The microwave facility between the two stations is southwest of the town of Molochnoye at 45-11-50N 033-13-10E. It serves as a relay between the Yevpatoriya Deep Space Tracking Facility and Simferopol Space Flight Center (45-03-26N 033-53-42E;

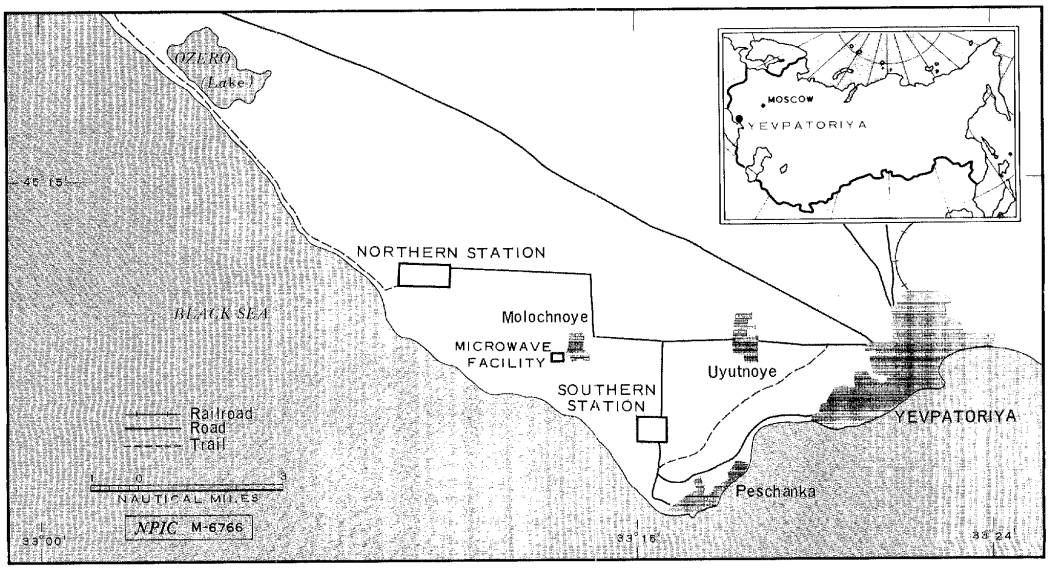

FIGURE 1. LOCATION MAP

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BASIC DESCRIPTION

Yevpatoriya Deep Space Tracking Facility, North

The northern station (Figure 2) contains a variety of tracking equipment including two receiving antenna arrays, 471 meters apart, on paved hardstands (items A1 and A2). Each array consists of eight 50-foot dishes and two 1-meter horns. The arrays are steerable in azimuth and elevation, and can be operated independently.[1] The antenna arrays were 25X1 25X1 complete in

East and southeast of the receiving antenna arrays are three pedestal-mounted Cassegrain-fed dish antennas mounted on concrete pedestals emplaced in concrete hardstands (items B1, B2, and B3). They are on a north-south baseline 981 meters long (the 25X1 northern two are 149 meters apart) along the east side of the station. The operation of these antennas is based on interferometric techniques. Between construction was started on three pedestals and hardstands.[2] In one of the 25X1 antennas (item B1) was mounted on the northernmost pedestal. In the 25X1 second dish (item B2) was observed on the ground adjacent to the central concrete pedestal. 25X1 In the second dish and the third, southernmost dish (item B3) were observed in place.

25X1 Three dishes (items C1, C3, and C4) are on a north-south baseline of approximately 385 meters (the northern two are about 44 meters apart) in the east-central 25X1 portion of the station. A fourth dish (item C2) is immediately east of the 25X1 northernmost two. Items C1 and C2 are cable connected. Items C1, C2, and C4 were 25X1 structurally complete in Item C3 was structurally complete in 25X1 25X1

A SHIP WHEEL-type antenna (item D1) is atop an operations building (item 49) in the south-central portion of the station. This antenna was structurally complete in 25X1

Possible telemetry antenna positions (item E1) are at each extremity of a road which forms a T-shaped intersection with another road extending south between the two 8-dish receiving antenna arrays, and through the security fence. At the intersection of the road is an antenna (item D2) similar to the SHIP WHEEL-type antenna (item D1) mentioned above. The possible telemetry antenna positions were structurally complete in 25X1

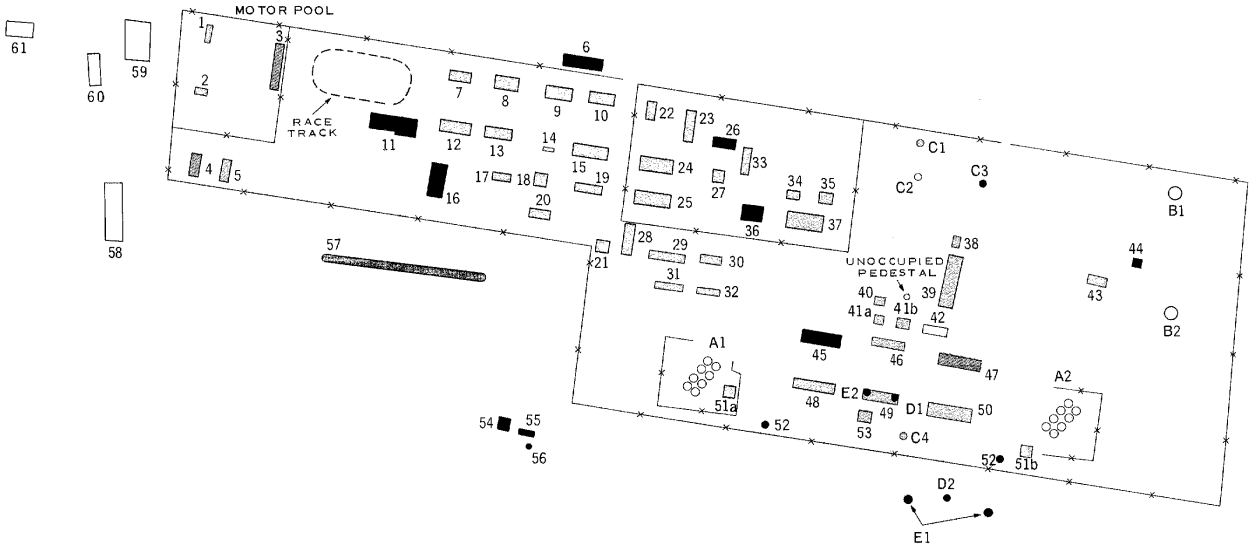
In addition to the six operations buildings (items 45-50), the station also contains 11 barracks, a motor pool, numerous support buildings, a water tower, and several rectangular clearings apparently intended for some type of new construction. Twelve of the support buildings and the water tower were visible at the station in An unidentified 25X1 building (item 55) and an adjacent cylindrical object (item 56) had been constructed by 25X1 and a possible telemetry antenna (item E2) was identified atop one of the 25X1 operations buildings (item 49). In a new operations building (item 45) was 25X1 observed. In four rectangular clearings (items 58-61) were observed for the first time immediately west of the support buildings (items 1, 2, and 4).

Yevpatoriya Deep Space Tracking Facility, South

The southern station (Figure 3) includes an antenna array containing eight 50-foot antenna dishes, an operations building for the array, about 35 support buildings of various functions, a small tank farm, and an area of new construction about 1 nm northwest of the secured area. It was first observed in and at that time contained the eight- 25X1 dish transmitting array (item 4) and approximately 28 support buildings.

25X1 In three separately secured areas could be identified. One contained the eight-dish antenna array (identical to the eight-dish arrays at the northern station) and its control building; the second was a possible communications area (item 27); and the third, a support area. Five additional support buildings and a cooling pond adjacent to the antenna array were also observed.

The facility remained essentially unchanged until when a tank 25X1 farm consisting of two semiburied storage tanks (item 34) was noted under construction at the southeast corner of the facility. In a rectangular area of 25X1 undetermined function was observed in the south portion of the tracking facility (item 38).



ITEM	DESCRIPTION	DIMENSIONS (FT) L	W
	ANTENNAS		
A1, A2	Receiving antenna array (eight 50-ft dishes)		
25X1 B1, B2, B3	pedestal-mounted dish antennas		
25X1 C1, C2, C3, C4	dish antennas		
D1, D2	SHIP WHEEL-type antennas		
E1, E2	Poss telemetry antenna positions		
	STRUCTURES		
25X1 1	Support bldg		
2	Support bldg		
3	Vehicle storage bldg		
4	Support bldg		
5	Support bldg		
6	Support bldg		
7	Barracks		
8	Barracks		
9	Barracks		
10	Barracks		
11	Prob recreation bldg		
12	Barracks		
13	Barracks		
14	Support bldg		
15	Barracks		
16	Recreation building		
17	Barracks		
18	Service bldg		
19	Admin bldg		
20	Unid structure		
21	Security bldg		
22	Unid structure		
23	Barracks		
24	Barracks		
25	Barracks		
26	Bldg foundation		
27	Support bldg		
28	Vehicle maintenance bldg		
29	Storage bldg		
30	Prob storage bldg		
31	Prob storage bldg		
32	Prob storage bldg		
33	Prob admin bldg		
34	Prob generator		
35	Prob generator		
36	Storage bldg		
37	Poss electronics maintenance bldg		
38	Support bldg		
39	Light machine shop		
40	Support bldg		
41	Transformer vault		
a	Section		
b	Section		
42	Support bldg		
43	Unid bldg		
44	Unid bldg		
45	Operations bldg		
46	Original operations bldg		
47	Operations bldg		
48	Operations bldg		
49	Operations bldg		
50	Operations bldg		
51	Control bldgs (2)		
52	Equipment positions (2)		
53	Transformer vault		
54	Unid bldg		
55	Unid bldg		
56	Cylindrical object		
57	Elongated excavation		
58	Rectangular clearing		
59	Rectangular clearing		
60	Rectangular clearing		
61	Rectangular clearing		

Note:

Road
Fence

200 0 500
FEET (APPROX)

25X1

NPIC M-6767

FIGURE 2. YEVPATORIYA DEEP SPACE TRACKING FACILITY, NORTH

25X1

25X1

25X1
25X1
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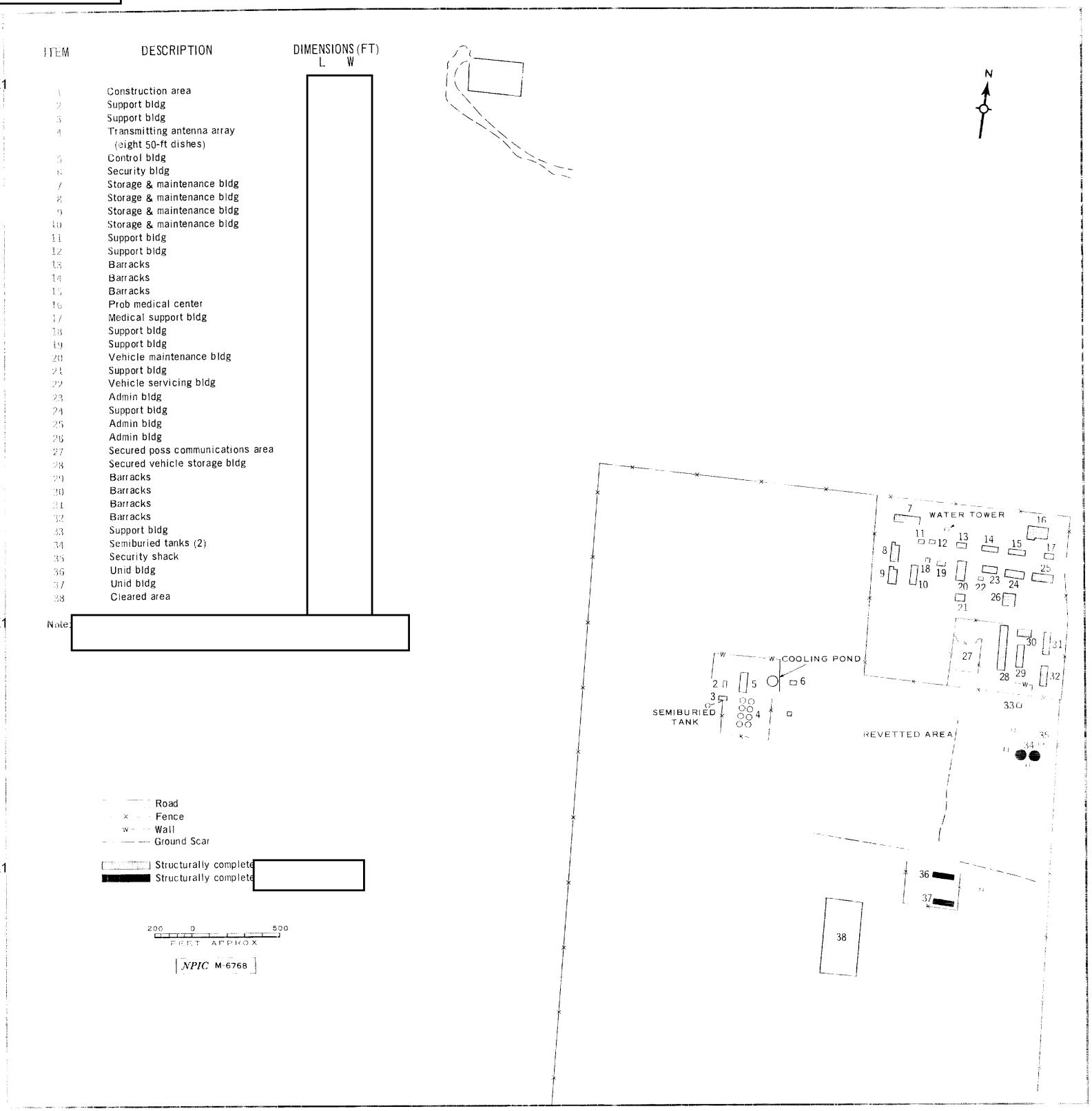

FIGURE 3. YEVPATORIYA DEEP SPACE TRACKING FACILITY, SOUTH

25X1

In [redacted] a rectangular area of undetermined construction activity (item 1) was observed 1 nm northwest of the tracking facility.

In [redacted] two buildings (items 36 and 37) were observed for the first time in a squared area immediately south of the support area.

Microwave Facility

The microwave facility (Figure 1) was present in [redacted] The fenced area is square, approximately 200 feet on a side. It contains two buildings and a microwave tower about 240 feet in height with an antenna of an undetermined type mounted atop it.

REFERENCES

IMAGERY

[redacted]

MAPS OR CHARTS

ACIC. US Air Target Chart 200, Sheet M0250-19IIL, 4th ed, Jun 66, scale 1:200,000 (SECRET) [redacted]

DOCUMENTS

1. FTD. [redacted] *Project BAND STAND, Report No 25*, 1 Jul 68 (TOP SECRET [redacted]

2. NPIC. [redacted] *Yevpatoriya Deep Space Tracking Center, USSR*, Aug 66 (TOP SECRET [redacted]

REQUIREMENT

COMIREX BR-C/005-69
NPIC Project 210649

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